AMENDMENT TO THE CLAIMS:

This listing of claims will replace all prior versions of claims in the application:

LISTING OF CLAIMS:

1. (CURRENTLY AMENDED) A method for fabricating a magnetic head, comprising:

~~creating a structure, comprising:~~

~~forming a first pole;~~

~~forming a cap above the first pole,~~

~~removing portions of the cap such that empty side regions are positioned laterally on opposite sides of the cap after removing the portions of the cap;~~

~~forming a dielectric gap layer above the cap;~~

~~forming a second pole above the gap layer; and~~

~~milling the structure for creating a shoulder of the first pole tapering upwardly towards the cap~~

creating a structure, comprising:

forming a first pole;

forming a cap above the first pole, empty side regions being positioned laterally on opposite sides of the cap;

filling the side regions with a fill material selected from a group consisting of a dielectric, a material susceptible to removal by reactive ion etching, and a material susceptible to removal by milling;

forming a dielectric gap layer above the cap and the fill material;

forming a second pole above the gap layer; and

milling the structure for creating a shoulder of the first pole tapering upwardly towards the cap.

2. (ORIGINAL) The method as recited in claim 1, further comprising filling the side regions with a material selected from a group consisting of a dielectric, a material susceptible to removal by reactive ion etching, and a material susceptible to removal by milling.

3. (ORIGINAL) The method as recited in claim 2, further comprising performing in sequence prior to milling the structure: removing exposed portions of the gap layer, and removing the material used to refill the side regions.

4. (ORIGINAL) The method as recited in claim 1, wherein side edges of the second pole, gap layer, and cap are substantially vertically aligned.

5. (ORIGINAL) The method as recited in claim 1, wherein the gap layer is alumina.

6. (ORIGINAL) The method as recited in claim 1, wherein the gap layer is silicon dioxide.

7. (ORIGINAL) The method as recited in claim 1, wherein the gap layer is nonmagnetic metal.

8. (ORIGINAL) The method as recited in claim 1, further comprising forming a seed layer above the gap layer, the second pole being plated on the seed layer.

9. (ORIGINAL) The method as recited in claim 1, wherein the structure is ion milled.

10. (CANCEL)

11. (CANCEL)

12. (CANCEL)

13. (CANCEL)

14. (CANCEL)

15. (ORIGINAL) A method for fabricating a magnetic head, comprising:
forming a first pole;
forming a cap above the first pole
removing opposite side regions of the cap;
refilling the side regions with a material selected from a group consisting of a dielectric, a material susceptible to removal by reactive ion etching, and a material susceptible to removal by milling;
forming a gap layer above the cap;
forming a second pole above the gap layer;
removing exposed portions of the gap layer;
removing the material used to refill the side regions, thereby exposing peripheral regions of the cap; and
milling the cap and first pole for creating a shoulder of the first pole tapered upwardly towards the cap;
wherein side edges of the second pole, gap layer, and cap are substantially vertically aligned after the milling.

16. (ORIGINAL) The method as recited in claim 15, wherein the exposed portions of the gap layer are removed by reactive ion etching.

17. (ORIGINAL) The method as recited in claim 15, wherein the gap layer is a dielectric.

18. (ORIGINAL) The method as recited in claim 15, wherein the gap layer is nonmagnetic metal.

19. (CANCEL)

20. (CANCEL)

21. (CANCEL)

22. (CANCEL)

23. (CANCEL)

24. (ORIGINAL) A head formed by the method recited in claim 1.

25. (CANCEL)

26. (ORIGINAL) A head formed by the method recited in claim 15.

27. (CANCEL)

28. (ORIGINAL) A magnetic storage system, comprising:
magnetic media;

at least one head formed according to the method recited in claim 1;
a slider for supporting the at least one head; and
a control unit coupled to the head for controlling operation of the head.

29. (CURRENTLY AMENDED) A magnetic storage system, comprising:
magnetic media;
at least one head formed according to the method recited in claim ~~19~~ 15;
a slider for supporting the at least one head; and
a control unit coupled to the head for controlling operation of the head.

30. (CANCEL)